

**ABSTRACT**

**LOCATION AND MOVEMENT OF REMOTE OPERATED VEHICLES**

5           A remote operated vehicle system comprises a topside, a fish equipped with a  
GPS receiver, a transmitter for transmitting GPS position data, and a receiver operable  
to receive the transmitted position data. Transmission may be from the fish to the  
topside or from the topside to the fish. Alternatively, a second transmitter and receiver  
give two-way transmission. These arrangements allow the position of the fish to be  
10 monitored or tracked, so that it can be readily rescued in the event of damage or  
breakdown. Alternatively, predetermined position data can be sent to the fish,  
allowing it to automatically navigate a desired route. Particular embodiments include  
an umbilical cable for connecting the fish and the topside together and operable to  
carry signals, including position data, between the two, an additional GPS receiver on  
15 the topside so that the fish can navigate to the topside unaided, and a buoyancy control  
device which brings the fish to the surface.